

**fnmoc\_TotalWx\_UM\_10Series**

**Defense Information Infrastructure (DII)  
Common Operating Environment (COE)**

**User's Manual (UM)  
for the  
Total Weather Segment  
Release 1.0 Series**

**16 November 2000**

**Prepared for:**

**Commander, Naval Meteorology and Oceanography Command  
Stennis Space Center, MS**

**Prepared by:**

**Fleet Numerical Meteorology and Oceanography Center  
Monterey, CA**

**and**

**Computer Sciences Corporation  
Monterey, CA**



## Table of Contents

<b>1</b>	<b>SCOPE.....</b>	<b>1</b>
1.1	Identification .....	1
1.2	System Overview .....	1
1.3	What's New?.....	1
<b>2</b>	<b>REFERENCED DOCUMENTS .....</b>	<b>2</b>
2.1	Government Documents.....	2
2.2	Non-Government Documents .....	2
<b>3</b>	<b>SOFTWARE SUMMARY.....</b>	<b>4</b>
3.1	Software Description.....	4
3.2	Software Inventory.....	4
3.3	Software Environment.....	4
3.4	Software Organization and Operation Overview .....	4
3.5	Modes of Operation.....	4
3.6	Security and Privacy.....	4
3.7	Assistance and Problem Reporting .....	5
<b>4</b>	<b>ACCESS TO THE SOFTWARE .....</b>	<b>6</b>
4.1	Software Setup .....	6
4.1.1	Navigation Basics.....	7
4.1.1.1	Windows Controls.....	8
4.1.2	Access Control .....	8
4.1.3	Installation and Configuration.....	9
4.2	Initiating a Session .....	9
4.3	Stopping and Suspending Work.....	9
<b>5</b>	<b>USING TOTAL WEATHER .....</b>	<b>10</b>
5.1	The Basics .....	10
5.2	The Total Weather Browser .....	11
<b>6</b>	<b>NOTES .....</b>	<b>14</b>
6.1	Glossary of Abbreviations.....	14
6.2	Known Problems and Workarounds .....	15
6.3	How to Report Problems with Total Weather.....	15
<b>7</b>	<b>DOCUMENTATION IMPROVEMENT AND FEEDBACK.....</b>	<b>16</b>

**List of Figures**

Figure 1. Configure Data Source Dialog for Total Weather .....	6
Figure 2. Two-button Mouse.....	7
Figure 3. Check Boxes .....	8
Figure 4. Typical Dialog Box.....	8
Figure 5. Total Weather Request Dialog.....	11
Figure 6. Total Weather Request Dialog With Station Selections.....	12
Figure 7. Total Weather Request Dialog With Downloaded Reports.....	13

# 1 SCOPE

## 1.1 Identification

This is the User's Manual for the Total Weather Segment, developed by Fleet Numerical Meteorology and Oceanography Center (FNMOC), Monterey, CA. This software is designed to run under the Defense Information Infrastructure (DII) Common Operating Environment (COE), release 3.1 or higher. The software runs under the following hardware and operating systems:

- Personal Computer (PC) running the Microsoft Windows NT 4.0 operating system with Service Pack 3 or higher, Windows 2000, or Windows 98.

This document has been developed in accordance with the *DII COE Developer Documentation Requirements, Version 2.0*.

## 1.2 System Overview

Total Weather is a lightweight client that provides a quick way to get textual observation data (METARs and TAFs) for stations selected by the user. After setting up the program to work with a server, the user simply enters or selects the ICAO call signs of the stations whose reports are desired, then tells the program to retrieve and display the reports. The Total Weather Segment includes a graphical user interface (GUI) to allow the user to select the stations and the products to be retrieved, and a retriever process that establishes communication with a METCAST server, submits a request for the data requested, and delivers the reply to the local user. The METCAST Server comprises a separate segment.

## 1.3 What's New?

This section lists changes made to Total Weather since the initial release.

Release 1.0.0.1 incorporates the following changes:

- Separate installation. The installer for Total Weather has been separated from those for METCAST Client and Joint METOC Viewer (JMV), so that Total Weather may now be installed and uninstalled separately.
- Help files and link. The Total Weather installer now installs help files for Total Weather and a Total Weather Help link on the Start menu in Windows installations.
-

## 2 REFERENCED DOCUMENTS

### 2.1 Government Documents

DDR-2 23 January 1998	<i>Defense Information Infrastructure (DII) Common Operating Environment (COE) Developer Documentation Requirements, Version 2.0</i> , Defense Information Systems Agency, Joint Operability and Engineering Organization
Unnumbered 18 June 1998	<i>Software Requirements Specification for METCAST</i> , Space and Naval Warfare Systems Command, Environmental Systems Program Office (SPAWAR PMW-185), San Diego, CA
fnmoc_TotalWx_SVD_1001 16 November 2000	<i>Software Version Description (SVD) for the Total Weather Segment, release 1.0.0.1</i>
fnmoc_TotalWx_IP_10Series 16 November 2000	<i>Installation Procedures (IP) for the Total Weather Segment, release 1.0 Series</i>

### 2.2 Non-Government Documents

World Meteorological Organization (WMO), Geneva, Switzerland

WMO 306 1995	<i>Manual on Codes</i>
WMO 386 1992	<i>Manual on the Global Telecommunications System</i>

This page intentionally left blank.

## 3 SOFTWARE SUMMARY

### 3.1 Software Description

Total Weather is a lightweight client that provides a quick way to get textual observation data (METARs and TAFs) for stations selected by the user. After setting up the program to work with a server, the user simply enters or selects the ICAO call signs of the stations whose reports are desired, then tells the program to retrieve and display the reports. The Total Weather Segment includes a graphical user interface (GUI) to allow the user to select the stations and the products to be retrieved, and a retriever process that establishes communication with a METCAST server, submits a request for the data requested, and delivers the reply to the local user. The METCAST Server comprises a separate segment.

### 3.2 Software Inventory

A complete inventory of the Total Weather software is contained in the *Total Weather Software Version Description* listed in [Section 2.1](#).

### 3.3 Software Environment

A complete description of the software environment, and a list of manuals provided with the Total Weather software, are contained in the *Total Weather Software Version Description* listed in [Section 2.1](#).

### 3.4 Software Organization and Operation Overview

The Total Weather software has two main units:

1. A GUI that allows the operator to select stations and products to be retrieved for each station. The GUI also includes the capability to configure the software to access the requested data via a particular server.
2. A retriever function that transports a request to the server, waits for a reply, and delivers the requested data to the client. The operation of the retriever is essentially transparent to the user; it is initiated according to the schedule established in the GUI, and delivers the data in the background.

### 3.5 Modes of Operation

Total Weather operates only in an interactive mode, retrieving and displaying data when prompted to do so by the user.

### 3.6 Security and Privacy

There are no security and privacy considerations peculiar to Total Weather.

### **3.7 Assistance and Problem Reporting**

The point of contact for assistance and problem reporting is:

Mr. Carlos Estrada  
Fleet Numerical Meteorology and Oceanography Center  
7 Grace Hopper Avenue  
Monterey, CA 93943

Phone: (831) 656-4344

E-mail: Estrada.Carlos@metnet.navy.mil

## 4 ACCESS TO THE SOFTWARE

### 4.1 Software Setup

Total Weather is currently installed along with both METCAST Client and Joint METOC Viewer (JMV). When you perform the installation, the installer searches for proxy settings (used if you need to pass through a firewall to get to your server) and, if it finds them, inserts them automatically into the Total Weather configuration file. If you had a Total Weather configuration file prior to the installation, it will not be changed.

You start Total Weather by double-clicking on the desktop icon that the installer created:



When you first start Total Weather, the Configure Data Source dialog shown below will be displayed. You use this dialog to set up a server to use with Total Weather.

A screenshot of the 'Configure Data Source' dialog box. It has a title bar with a close button. The dialog is divided into sections: 'Server URL' with a text field containing 'http://152.80.49.210/cgi-bin/mcsrvr/rest/server'; 'Proxy Server' with a checked 'Use Proxy Server' checkbox, and sub-fields for 'URL' (152.80.52.100) and 'Port' (80); and 'Authorization' with a checked 'Use Authorization' checkbox, and empty text fields for 'Username' and 'Password'. 'Ok' and 'Cancel' buttons are at the bottom right.

**Figure 1.** Configure Data Source Dialog for Total Weather

Note that the server setup only has to be done once. Once the server is set up, Total Weather will not show this dialog again unless you want to change the server configuration or add or delete servers.

Total Weather is configured by default to use the FNMOC server, so if that suits your needs you don't need to enter server information. Otherwise, obtain the server URL from your System Administrator and enter it in the **Server URL** box.

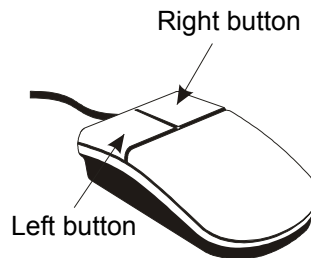
As mentioned above, the installer checks for a proxy and, if it finds one, inserts the proxy information (**URL** and **Port**) automatically and checks the **Use Proxy Server** checkbox. If you don't need to use the proxy to get to your server, uncheck the **Use Proxy Server** checkbox.

The **Use Authorization** checkbox is also checked by default. If your server requires you to enter a user name and password, enter them in the appropriate boxes. Otherwise, uncheck the **Use Authorization** box.

Click the **OK** button to proceed with Total Weather. The **Cancel** button will close the dialog without making any changes.

#### 4.1.1 Navigation Basics

The figure below shows a standard 2-button mouse, which provides the easiest way to navigate through the Total Weather browser.



**Figure 2. Two-button Mouse**

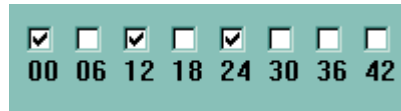
The mouse has a ball on its underside that's hooked to sensors. As you push the mouse about on the mouse pad, the ball rolls and moves the sensors, which then tell the computer to move the cursor on the screen. The buttons on the mouse are used to select items from menus, or to cause some action when an active area of the screen is pointed to by the cursor. There are several different actions you can perform using the mouse buttons:

- |                      |  |
|----------------------|--|
| <b>Click</b>         | You <u>click</u> by pressing the <u>left</u> mouse button once and then quickly releasing it.  |
| <b>Double-Click</b>  | This means clicking twice in rapid succession.   |
| <b>Right-Click</b>   | Same as a click, but using the <u>right</u> mouse button.  |
| <b>Drag and Drop</b> | To “drag” an object, you put the cursor over it, press and hold the left mouse button, and move the mouse to move the object to a new location. You “drop” the object on its new location by releasing the mouse button. |

Nearly all of the actions you perform using the mouse in Total Weather can also be performed using the keyboard. When you select a station from the station list, for example, you can either click on the **Add->** button or press the **Enter** key to move the station into the Selected Stations list. You can also use the arrow keys to move between the buttons, then press the **Enter** key to perform the action associated with the selected button..

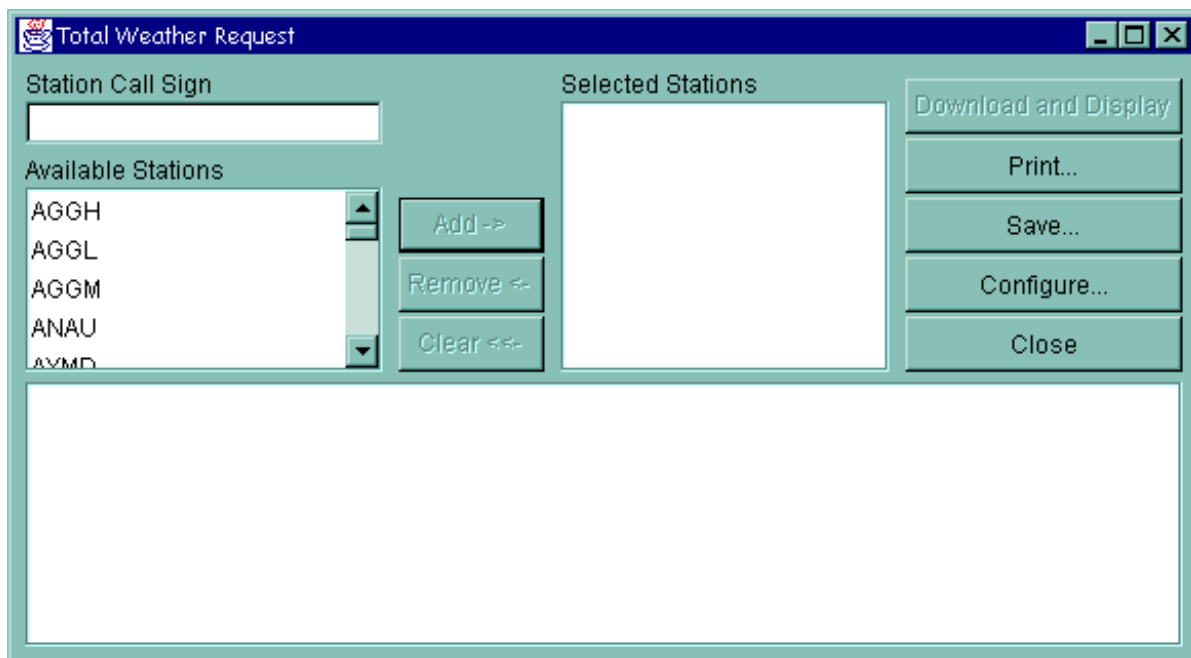
#### 4.1.1.1 Windows Controls

**Check Boxes** are selectors for individual items. They often come in sets; more than one box in the set may be selected at a time. A selected check box displays a “✓” or an “X”, while an unselected check box is blank. The picture below shows a set of check boxes.



**Figure 3. Check Boxes**

**Dialog Boxes** are windows with controls that allow you to interact with the program by making selections, typing in information, using check boxes, or clicking on buttons. A typical dialog box is shown in Figure 4. This is the Total Weather browser, and it contains type-in boxes, list boxes, and buttons to help you select, download, and view data.



**Figure 4. Typical Dialog Box**

#### 4.1.2 Access Control

There is no access control specific to Total Weather; the System Administrator controls access to the software on the host machine through granting of user accounts and privileges.

### **4.1.3 Installation and Configuration**

The *Total Weather Installation Procedures (IP)* referenced in [Section 2](#) provide complete instructions for installation of the METCAST Client software.

## **4.2 Initiating a Session**

To start Total Weather, double-click on the desktop icon.

## **4.3 Stopping and Suspending Work**

You can stop Total Weather or by clicking the Close button  at the upper right corner of the METCAST Client window.

## 5 USING TOTAL WEATHER

This section shows you how to use Total Weather's Browser to select stations and to view the data you have retrieved.

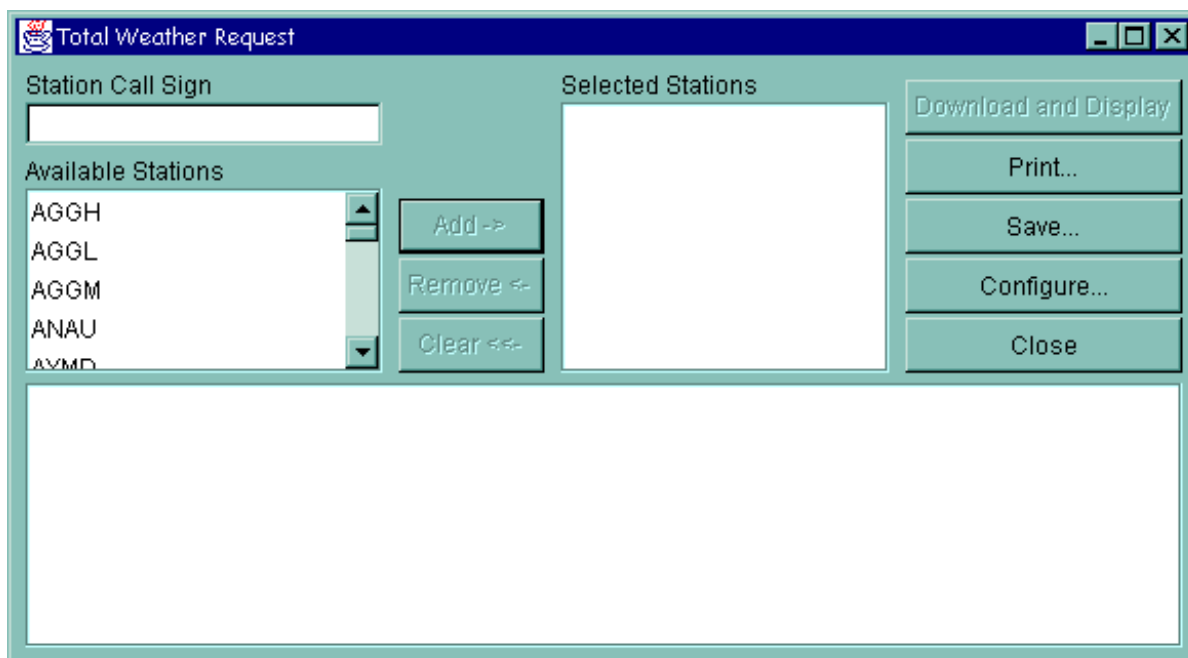
### 5.1 The Basics

To use METCAST Client to retrieve and view data, follow this set of steps:

1. Configure the Server. Section 4.1 shows how to configure the server from which Total Weather will retrieve the requested data. This must be done before you can use the browser to retrieve and view data. To configure Total Weather to use a different server at any time, just click on the **Configure** button to open the server configuration dialog.
2. Select stations to retrieve. The first step in normal use of Total Weather (after the initial configuration of the server) is to select stations. The Total Weather browser shows two lists of stations. The left-hand list shows all stations that are available; the right-hand list shows stations that are selected for download. The **Add->** and **<-Remove** buttons allow you to move stations between the two lists, and the **<<-Clear** button lets you clear all stations from the **Selected Stations** list. You can also add a station by typing its ICAO call sign in the entry box at the top, then clicking the **Add->** button or pressing the **Enter** key.
3. Retrieve data. Once you have selected the stations to be downloaded, just click on the **Download and Display** button to download the METAR reports and TAF forecasts from the selected stations and view them on screen. Once data have been retrieved, you can use the **Print** button to send the data to the printer, and the **Save** button to save the retrieved data in a text file.

## 5.2 The Total Weather Browser

At the end of server setup on the initial run, or when you start Total Weather thereafter, the Total Weather dialog shown below will be displayed. This dialog is the one you use to retrieve and display reports.



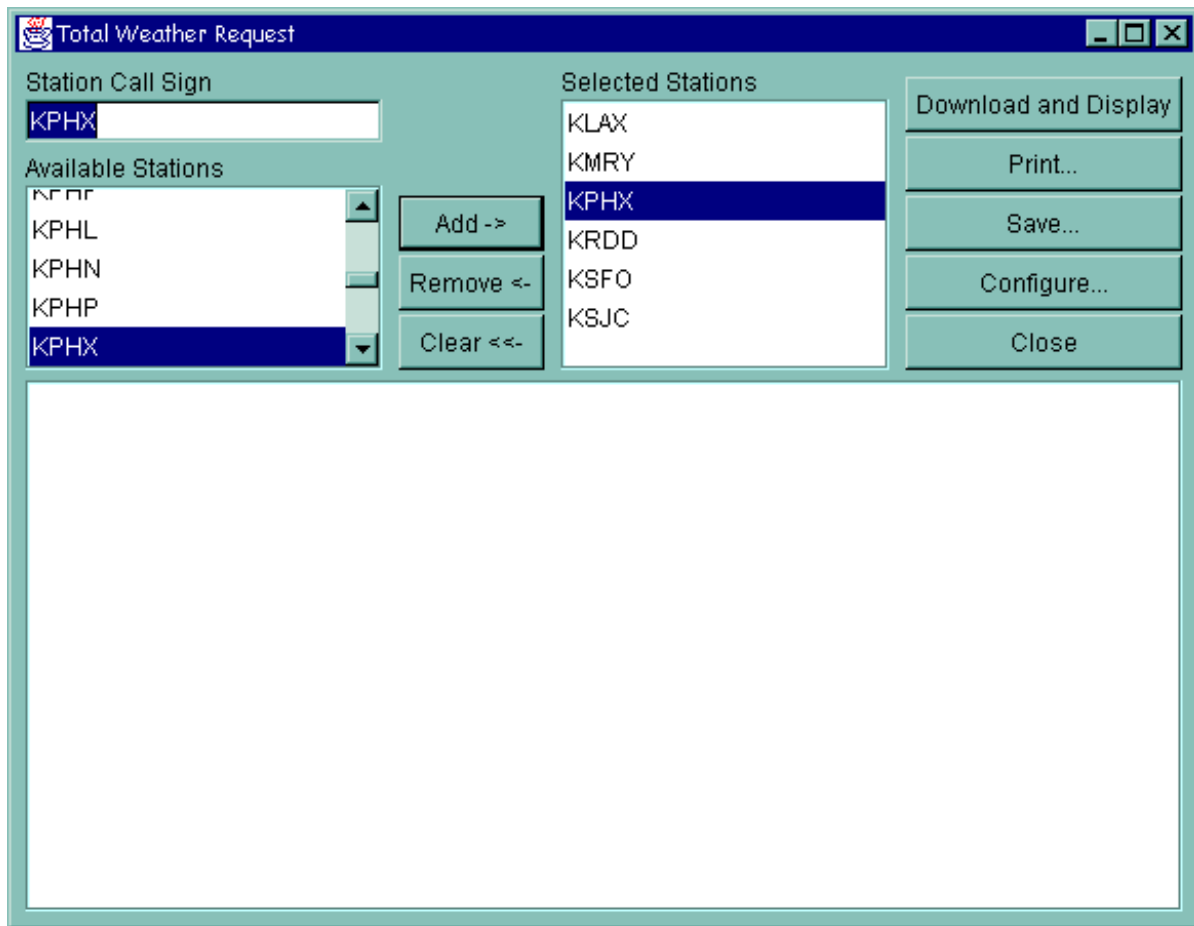
**Figure 5.** Total Weather Request Dialog

To request data for a station, you can either:

1. Type the station's ICAO call sign in the **Station Call Sign** box. Notice that as you type, the list in the **Available Stations** box scrolls down to the nearest match to what you're typing. You can select from the list to complete the entry or simply finish typing it.
2. Select the desired station from the scrollable list of **Available Stations**.

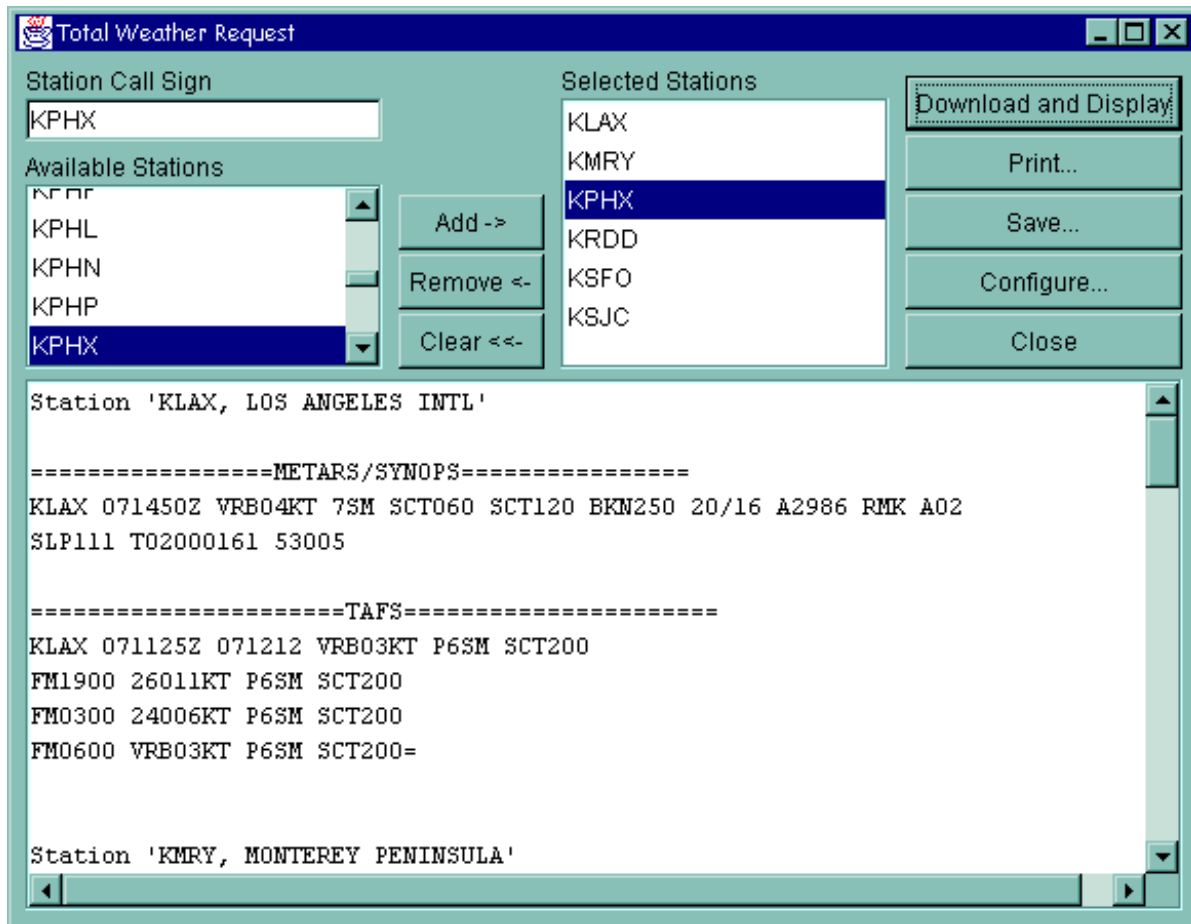
When you have a station's call sign displayed in the **Station Call Sign** box, either click the **Add->** button or press the **Enter** key to move the station into the **Selected Stations** list. Note that when you do this, the entry in the **Station Call Sign** box is highlighted, meaning that you can overwrite it with another selection. You can continue the selection process until all of the desired stations are shown in the **Selected Stations** list. Generally, the easiest way for most people to select multiple stations is to type a station call sign, press **Enter**, type another station call sign, press **Enter**, and continue until all of the desired stations are selected.

The **Remove->** button is used to remove a station from the **Selected Stations** list -- just highlight the station name and click this button to move it back to the **Available Stations** list. The **Clear->** button clears all entries from the **Selected Stations** list.



**Figure 6.** Total Weather Request Dialog With Station Selections

The illustration above shows the Total Weather Request dialog with stations selected. Note that when you have stations selected, the **Download and Display** button is activated. Click this button to download and display reports for the stations you have selected. The figure below shows the reports for the selected stations.



**Figure 7.** Total Weather Request Dialog With Downloaded Reports

The reports are displayed station by station (i.e. all reports for KLAX, then all for KMRY, etc.). Note that METARs, SPECIs, and TAFs are all downloaded.

The **Print...** button allows you to print the displayed reports to the default printer. The **Save...** button opens a File Save dialog that lets you save the list of reports as a text file for future reference. The **Close** button exits Total Weather.

The **Configure** button opens the Configure Data Source dialog shown in Section A.2 to allow you to change the server configuration.

## 6 NOTES

### 6.1 Glossary of Abbreviations

COE	Common Operating Environment
DII	Defense Information Infrastructure
FNMOCC	Fleet Numerical Meteorology and Oceanography Center
GUI	Graphical User Interface
HTTP	Hyper-Text Transfer Protocol
ICAO	International Civil Aviation Organization
IP	Installation Procedures
JMV	Joint METOC Viewer
METOC	Meteorological and Oceanographic
MIME	Multipurpose Internet Mail Extensions
PC	Personal Computer
SPAWAR	Space and Naval Warfare Systems Command
SVD	Software Version Description
TAC	Tactical Advanced Computer
UM	User's Manual
URL	Uniform Resource Locator

## 6.2 Known Problems and Workarounds

The following known problems are currently being worked on:

1. Total Weather may have problems in installations where the METCAST Server is on the other side of the firewall from the OMF.DTD file used to specify the XML format for the retrieved observations. This can cause a “No data available” error message. FNMOC is investigating ways to place the OMF.DTD file on the server.
2. There is currently no menu bar in the browser; therefore there is no Help menu item. As a temporary measure, we have modified the installer to place a Total Weather Help shortcut in the Windows Start menu (FNMOC-SPAWAR program group) to permit users to access the help file.
3. Some users have expressed a desire to be able to enter multiple station IDs in the entry box, separated by spaces, so that they can enter multiple stations at a time. We suggest entering a station ID, pressing the **Enter** key, then repeating these operations to complete the station list. This involves no more keystrokes than the method suggested by users, merely requiring the **Enter** key to be pressed rather than the space bar between station IDs.

## 6.3 How to Report Problems with Total Weather

1. What to do when the error occurs:
  - To save the error window or screen, put the cursor in the error window.
  - Press ALT-PrintScreen together. This copies the error window.
  - Go to Word or PowerPoint. Paste the image of the error window.
  - Save the image as a GIF or JPG file.
2. What to put in the problem report
  - Describe what stations were being retrieved in Total Weather.
  - If Dr Watson errors occur, then including the Dr Watson Log file is helpful.
  - The Dr Watson Error logs can be found in /Winnt/drwt32.log
4. Send Email with attachments
  - Send Email with Problem description, version numbers, the ZIP file, GIF image of error messages and Dr Watson Logs.

## **7 DOCUMENTATION IMPROVEMENT AND FEEDBACK**

Comments and other feedback on this document should be directed to the DII COE Hotline:

Phone: 703-735-8681

Fax.: 703-735-3080

Email: HotlineC@ncr.disa.mil

This page intentionally left blank.